

IN THE CLAIMS

Please amend the claims as follows:

1. (Previously Presented) A method to detect the presence or amount of a first molecule for a first enzyme-mediated reaction and a second molecule for a second enzyme-mediated reaction, comprising:
 - a) contacting a sample with a reaction mixture for a first enzyme-mediated reaction to detect a first molecule, and with a reaction mixture for a second enzyme-mediated reaction to detect a second molecule, wherein a reaction mediated by a first enzyme in the first reaction yields a bioluminogenic product, and wherein a reaction mediated by a second enzyme in the second reaction yields a fluorogenic product; and
 - b) detecting the presence or amount of the first and the second molecules in the sample.
2. (Original) The method of claim 1 wherein the first molecule is a substrate for the first enzyme-mediated reaction.
3. (Original) The method of claim 1 wherein the second molecule is a substrate for the second enzyme-mediated reaction.
4. (Original) The method of claim 1 wherein the first molecule is an enzyme for the first enzyme-mediated reaction.
5. (Original) The method of claim 1 wherein the second molecule is an enzyme for the second enzyme-mediated reaction.
6. (Original) The method of claim 1 wherein the first molecule is a co-factor for the first enzyme-mediated reaction.
7. (Original) The method of claim 1 wherein the second molecule is a co-factor for the

second enzyme-mediated reaction.

8. (Previously Presented) The method of claim 1 wherein bioluminescence is employed to detect the first molecule.
9. (Original) The method of claim 1 wherein fluorescence is employed to detect the second molecule.
10. (Original) The method of claim 1 wherein the presence or amount of the first and second molecules is detected sequentially.
11. (Original) The method of claim 1 wherein the sample is a cell lysate.
12. (Original) The method of claim 1 wherein the sample is contacted with the reaction mixture for the first reaction before the reaction mixture for the second reaction.
13. (Original) The method of claim 1 wherein the sample is contacted with the reaction mixture for the second reaction before the reaction mixture for the first reaction.
14. (Original) The method of claim 1 wherein the sample is contacted with the reaction mixture for the first reaction and the second reaction at the same time.
- 15-84. (Canceled)
85. (Previously Presented) The method of claim 8 wherein the bioluminescence increases in the presence of the first molecule.
86. (Previously Presented) The method of claim 1 wherein the bioluminogenic product is a substrate for a beetle luciferase.

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87. (Previously Presented) The method of claim 1 wherein the fluorogenic product comprises fluorescein, Cy3, BODIPY™ (4,4-difluoro-1,3-dipropyl-4-bora-3a,4a-diaza-s-indacene), a rhodol, Rox, 5-carboxyfluorescein, 6-carboxyfluorescein, an anthracene, 2-amino-4-methoxynaphthalene, a phenalenone, an acridone, fluorinated xanthene derivatives, α -naphthol, β -naphthol, 1-hydroxypyrene, coumarin, 7-amino-4-methylcoumarin (AMC), 7-amino-4-trifluoromethylcoumarin (AFC), TEXAS RED™ (sulforhodamine 101), tetramethylrhodamine, carboxyrhodamine, rhodamine, cresyl, rhodamine-110 or resorufin.
88. (Previously Presented) The method of claim 1 wherein the first molecule is a protease.
89. (Previously Presented) The method of claim 1 wherein the second molecule is a protease.
90. (Previously Presented) The method of claim 1 wherein one of the molecules is a glycosidase, phosphatase, kinase, dehydrogenase, peroxidase, sulfatase, peptidase, or hydrolase.
91. (Previously Presented) The method of claim 1 wherein the presence or amount of the first and second molecules is detected simultaneously.
92. (Canceled).
93. (Previously Presented) The method of claim 10 wherein bioluminescence is employed to detect the presence or amount of the first molecule prior to detection of the second molecule.
94. (Previously Presented) The method of claim 10 wherein bioluminescence is employed to detect the presence or amount of the first molecule after detection of the second molecule.

95. (New) The method of claim 1 wherein bioluminescence is employed to detect the first molecule and fluorescence is employed to detect the second molecule.
96. (New) The method of claim 95 wherein the bioluminogenic product is a substrate for a beetle luciferase.
97. (New) The method of claim 95 wherein one of the molecules is a glycosidase, phosphatase, kinase, dehydrogenase, peroxidase, sulfatase, protease, or hydrolase
98. (New) The method of claim 1 wherein the sample comprises mammalian cells.